

REMARKS/ARGUMENTS

The Examiner is thanked for the detailed comments. While the Applicants have carefully reviewed the Examiner's rejections, they respectfully request the Examiner's further consideration of the reasons set out below:

Claim Rejections – 35 U.S.C. § 102(e)

Claims 1, 3-6, 12-13 were rejected under 35 U.S.C §102(e) as being anticipated by Clark et al US publication no. 2004/0208516.

The Present Application

The present application provides a novel method and system for powering up an optical network remotely and safely by incrementally increasing power to optical links in the optical network while monitoring signal levels in the network. In a modification to the method, the procedure for powering up the network also includes the general step of setting attenuation and gain values. The method for setting attenuation and gain values is not specified in the invention, and exemplary references are provided to other patent applications that specify such methods. Thus, the present invention does not set optimized network device parameters, but rather provides for network devices to be safely brought to an operating level that is detectable.

The Clark Reference

Clark's invention discloses a system and method for pre-emphasizing power levels launched into an optical network to compensate for wavelength channel variations in signal to noise ratio (SNR). This is done through a feedback loop that measures the SNR and sets the initial launched power levels of each wavelength channel to control SNR. Clark uses an inverse SNR profile as the pre-emphasis profile, which maximizes dynamic range. Applicant notes that nothing is suggested or contemplated in the Clark reference regarding a method or system for powering up the optical network.

In fact, the present application could be considered as a potential implementation of only one of the steps in Clark's invention, namely the step of "setting an initial launch power

profile $P(\lambda)$ ” (page 3, paragraph 0032).

Regarding claims 1 and 12, Clark does not disclose a method for powering up an optical network. Clark discloses a method of pre-emphasizing launched power levels in an optical network.

In particular, Clark does not comprise a step of (c) “gradually increasing optical power ... until the optical signal is detected”, and (d) “verifying if the detected optical signal is being detected at a correct location” of the present invention.

Regarding claim 3, the present invention discloses continuously and “gradually increasing optical power ... until the optical signal is detected at the monitoring point”. This is just one step in the present application, which in general provides a method of safely powering up an optical network.

In contrast, Clark’s invention includes a step to “set power levels of each laser diode (405-1 through 405-N) according to the initial launch power profile by appropriately biasing each laser diode” (page 3, paragraph 0032) before implementing pre-emphasis.

As mentioned above, the present application could be considered as a specific implementation of this step in Clark’s invention, which beneficially ensures that network power levels are insufficient to cause damage, and detects and repairs network misconnections.

Regarding claim 4, the present invention discloses “gradually increasing optical power” by “decreasing attenuation of attenuators ... until the optical signal is detected at the monitoring point”. This is just one step in the present application, which in general provides a method of safely powering up an optical network.

In contrast, Clark’s invention includes a step to “set power levels of each laser diode (405-1 through 405-N) according to the initial launch power profile by ... controlling the adaptive attenuators” (page 3, paragraph 0032) before implementing pre-emphasis. As discussed above, the present application could be one specific implementation of this step in Clark’s invention, which beneficially ensures that network power levels are insufficient to cause damage, and detects and repairs network misconnections.

Regarding claim 5, Clark does not disclose setting attenuation of attenuators and gain settings of amplifiers. Clark simply states that the optical networks may include “optical

conditioning units that multiplex and amplify optical signals” (page 2, paragraph 0025).

Regarding claims 6 and 13, Clark does not disclose “gradually increasing optical power in steps provided by sets of precalculated link budgets”.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 2, 7-11 were rejected under 35 U.S.C §103(a) as obvious in view of Clark et al (US publication no. 2004/0208516.)

Claims 2 and 7-11 are not obvious in view of Clark for the following reasons: as the examiner’s rejections under 103(a) are based on the assumption that claim 1 is anticipated by Clark and all features of claim 1 are present in Clark, and 103(a) rejections were only referred to additional features present in claims 2 and 7-11, therefore 103(a) rejections are not applicable to claims 2 and 7-11 as Clark would not have each and every feature of claims 2 and 7-11.

In addition, regarding claims 8-11 concerning reconnecting the selected section of the optical link according to the network specification, while it may be known to reconnect the selected section of the optical link according to the network specification, the present invention provides the means to detect that the network is incorrectly connected and the means to verify that it is correctly connected after the step of reconnecting, all of these features are not being present in Clark.

Conclusion

No new matter has been added.

As discussed above, the invention is neither anticipated by Clark nor obvious on view of Clark, and therefore the examiner's rejections under 35 USC 102(e) and 103(a) have been overcome.

In view of the foregoing, a favorable consideration of the application is courteously requested.

Respectfully submitted,



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